Document 4. Indicators of Commonly Over-Used Services

Disclaimer: These are examples of services that were chosen by the various specialty societies in the Choosing Wisely initiative. These or others from Choosing Wisely should be used by payors/employers based on an assessment of claims data and other pertinent information. Payors and employers should examine their data to determine which disease have high prevalence rates in their population and determine which indicators will impact the specific target population in terms of quality of care and cost. Please also note Choosing Wisely is routinely updated by the specialty societies based on the latest evidence and consensus among their members.

1. Antibiotics for Acute Rhinosinusitis

Don't indiscriminately prescribe antibiotics for uncomplicated acute rhinosinusitis.

Antibiotics are not recommended for patients with uncomplicated acute rhinosinusitis who have mild illness and assurance of follow-up. If a decision is made to treat, amoxicillin should be first-line antibiotic treatment for most acute rhinosinusitis.

Source: Choosing Wisely, American Academy of Allergy, Asthma & Immunology (also listed in HSCRC white paper & Milliman Waste Calculator)

2. Immunoglobulin G/ immunoglobulin E Testing

Don't perform unproven diagnostic tests, such as immunoglobulin G (IgG) testing or an indiscriminate battery of immunoglobulin E (IgE) tests, in the evaluation of allergy.

Appropriate diagnosis and treatment of allergies requires specific IgE testing (either skin or blood tests) based on the patient's clinical history. The use of other tests or methods to diagnose allergies is unproven and can lead to inappropriate diagnosis and treatment. Appropriate diagnosis and treatment is both cost effective and essential for optimal patient care.

Source: Choosing Wisely, American Academy of Allergy, Asthma & Immunology (also listed in HSCRC white paper & Milliman Waste Calculator)

3. Lower Back Pain Image

Don't do imaging for low back pain within the first six weeks, unless red flags are present.

Red flags include, but are not limited to, severe or progressive neurological deficits or when serious underlying conditions such as osteomyelitis are suspected. Imaging of the lower spine before six weeks does not improve outcomes, but does increase costs. Low back pain is the fifth most common reason for all physician visits.

Source: Choosing Wisely, American Academy of Family Physicians, American Society of Anesthesiologists – Pain Medicine, North American Spine Society-similar recommendation (also in HSCRC white paper & Milliman Waste Calculator)

4. Radiographic Imaging for Uncomplicated Acute Rhinosinusitis

Don't routinely obtain radiographic imaging for patients who meet diagnostic criteria for uncomplicated acute rhinosinusitis.

Viral infections cause the majority of acute rhinosinusitis and only 0.5 percent to 2 percent progress to bacterial infections. Most acute rhinosinusitis resolves without treatment in two weeks. Uncomplicated acute rhinosinusitis is generally diagnosed clinically and does not require a sinus CT scan or other imaging.

Source: Choosing Wisely: American Academy of Allergy, Asthma & Immunology, American Academy of Otolaryngology (also listed in HSCRC white paper & Milliman Waste Calculator)

5. Stress Cardiac Imaging or Advanced Non-Invasive Imaging

Don't perform stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present

Asymptomatic, low-risk patients account for up to 45 percent of unnecessary "screening." Testing should be performed only when the following findings are present: diabetes in patients older than 40-years-old; peripheral arterial disease; or greater than 2 percent yearly risk for coronary heart disease events.

Source: Choosing Wisely, American College of Cardiology (also in Milliman Waste Calculator)

6. Dexa

Don't use dual-energy x-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 or men younger than 70 with no risk factors.

DEXA is not cost effective in younger, low-risk patients, but is cost effective in older patients.

Source: Choosing Wisely, American Academy of Family Physicians (also in Milliman Waste Calculator)

7. Echocardiography as Routine Follow-Up

Don't perform echocardiography as routine follow-up for mild, asymptomatic native valve disease in adult patients with no change in signs or symptoms.

Patients with native valve disease usually have years without symptoms before the onset of deterioration. An echocardiogram is not recommended yearly unless there is a change in clinical status.

Source: Choosing Wisely, American College of Cardiology (also listed in Milliman Waste Calculator)

8. Electroencephalography (EEG) for Headaches

Don't perform electroencephalography (EEG) for headaches.

EEG has no advantage over clinical evaluation in diagnosing headache, does not improve outcomes and increases cost. Recurrent headache is the most common pain problem, affecting 15% to 20% of people.

Source: Choosing Wisely, American Academy of Neurology (also listed in Milliman Waste Calculator)

9. Pap Smear Hysterectomy

Don't perform pap smears on women with previous hysterectomy.

Pap smears are not helpful in women after hysterectomy (for non-cancer disease) and there is little evidence for improved outcomes.

Source: Choosing Wisely, American Academy of Family Physicians (also listed in Milliman Waste Calculator)

10. Pap Smear Under 21

Don't perform pap smears on women younger than 21.

Most observed abnormalities in adolescents regress spontaneously, therefore Pap smears for this age group can lead to unnecessary anxiety, additional testing and cost.

Source: Choosing Wisely, American Academy of Family Physicians (also listed in Milliman Waste Calculator)

11. Pre-operative Chest Radiography

Don't order pre-op chest radiographs in the absence of a clinical suspicion for intrathoracic pathology

In the absence of cardiopulmonary symptoms, preoperative chest radiography rarely provides any meaningful changes in management or improved patient outcomes.

Source: Choosing Wisely, American College of Physicians, American College of Radiology & American College of Surgeons (similar recommendation & listed in HSCRC white paper)

12. Screening for asymptomatic carotid artery stenosis (CAS)

Don't screen for asymptomatic CAS in the general adult population

There is good evidence that for adult patients with no symptoms of carotid artery stenosis, the harms of screening outweigh the benefits. Screening could lead to non-indicated surgeries that result in serious harms, including death, stroke and myocardial infarction.

Source: Choosing Wisely, American Academy of Family Physicians (also listed in HSCRC white paper)

13. Induction of labor

Don't schedule elective, non-medically indicated inductions of labor or Cesarean deliveries before 39 weeks 0 days gestational age.

Delivery prior to 39 weeks 0 days has been shown to be associated with an increased risk of learning disabilities and a potential increase in morbidity and mortality. There are clear medical indications for delivery prior to 39 weeks 0 days based on maternal and/or fetal conditions. A mature fetal lung test, in the absence of appropriate clinical criteria, is not an indication for delivery.

Source: Choosing Wisely, American College of Obstetricians & Gynecologists, American Academy of Family Physicians

14. Suspected pulmonary embolism

Don't obtain imaging studies as the initial diagnostic test. In patients with low pretest probability of venous thromboembolism (VTE), obtain a high-sensitive D-dimer measurement as the initial diagnostic test.

In patients with low pretest probability of VTE as defined by the Wells prediction rules, a negative high-sensitivity D-dimer measurement effectively excludes VTE and the need for further imaging studies.

Source: Choosing Wisely, American College of Physicians, American College of Radiology & American College of Chest Physicians/American Thoracic Society (similar recommendation)

15. Lyme disease testing

Don't test for Lyme disease as a cause of musculoskeletal symptoms without an exposure history and appropriate exam findings.

The musculoskeletal manifestations of Lyme disease include brief attacks of arthralgia or intermittent or persistent episodes of arthritis in one or a few large joints at a time, especially the knee. Lyme testing in the absence of these features increases the likelihood of false positive results and may lead to unnecessary follow-up and therapy. Diffuse arthralgias, myalgias or fibromyalgia alone are not criteria for musculoskeletal Lyme disease.

Source: Choosing Wisely, American College of Rheumatology

16. Voiding cystourethrogram (VCUG)

Don't perform voiding cystourethrogram (VCUG) routinely in first febrile urinary tract infection (UTI) in children aged 2–24 months.

The risks associated with radiation (plus the discomfort and expense of the procedure) outweigh the risk of delaying the detection of the few children with correctable genitourinary abnormalities until their second UTI.

Source: Choosing Wisely, American Academy of Family Physicians

17. Testosterone

Don't prescribe testosterone to men with erectile dysfunction who have normal testosterone levels.

While testosterone treatment is shown to increase sexual interest, there appears to be no significant influence on erectile function at least not in men with normal testosterone levels. The information available in studies to date is insufficient to fully evaluate testosterone's efficacy in the treatment of men with erectile dysfunction who have normal testosterone levels.

Source: Choosing Wisely, American Urological Association, Endocrine Society and American Association of Clinical Endocrinologists-similar recommendation

18. Antipsychotics and dementia

Don't use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia.

Behavioral and psychological symptoms of dementia are defined as the non-cognitive symptoms and behaviors, including agitation or aggression, anxiety, irritability, depression, apathy and psychosis. Evidence shows that risks (e.g., cerebrovascular effects, mortality, parkinsonism or extrapyramidal signs, sedation, confusion and other cognitive disturbances, and increased body weight) tend to outweigh the potential benefits of antipsychotic medications in this population. Clinicians should limit the use of antipsychotic medications to cases where non-pharmacologic measures have failed and the patients' symptoms may create a threat to themselves or others.

Source: Choosing Wisely, American Psychiatric Association, American Geriatric Society

19. Antipsychotics and children

Don't routinely prescribe antipsychotic medications as a first-line intervention for children and adolescents for any diagnosis other than psychotic disorders.

Recent research indicates that use of antipsychotic medication in children has nearly tripled in the past 10 to 15 years, and this increase appears to be disproportionate among children with low family income, minority children and children with externalizing behavior disorders (i.e., rather than schizophrenia, other psychotic disorders and severe tic disorders). Evidence for the efficacy and tolerability of antipsychotic medications in children and adolescents is inadequate and there are notable concerns about weight gain, metabolic side effects and a potentially greater tendency for cardiovascular changes in children than in adults.

Source: Choosing Wisely, American Psychiatric Association

20. CT scans in children

Computed tomography (CT) scans are not necessary in the routine evaluation of abdominal pain.

Utilization of CT imaging in the emergency department evaluation of children with abdominal pain is increasing. The increased lifetime risk for cancer due to excess radiation exposure is of special concern given the acute sensitivity of children's organs. There also is the potential for radiation overdose with inappropriate CT protocols.

Source: Choosing Wisely, American Academy of Pediatrics

21. Coronary artery calcium scores

Don't use coronary artery calcium scoring for patients with known coronary artery disease (including stents and bypass grafts).

Coronary artery calcium scoring is used for evaluation of individuals without known coronary artery disease and offers limited incremental prognostic value for individuals with known coronary artery disease, such as those with stents and bypass grafts.

Source: Choosing Wisely, Society of Cardiovascular Computed Tomography

22. EMG/NSC

Don't use electromyography (EMG) and nerve conduction studies (NCS) to determine the cause of axial lumbar, thoracic or cervical spine pain.

Electromyography and nerve conduction studies are measures of nerve and muscle function. They may be indicated when there is concern for a neurologic injury or disorder, such as the presence of leg or arm pain, numbness or weakness associated with compression of a spinal nerve. As spinal nerve injury is not a cause of neck, mid back or low back pain, EMG/NCS have not been found to be helpful in diagnosing the underlying causes of axial lumbar, thoracic and cervical spine pain.

Source: Choosing Wisely, North American Spine Society

23. Hypercoagulable testing

Don't do work up for clotting disorder (order hypercoagulable testing) for patients who develop first episode of deep vein thrombosis (DVT) in the setting of a known cause.

Lab tests to look for a clotting disorder will not alter treatment of a venous blood clot, even if an abnormality is found. DVT is a very common disorder, and recent discoveries of clotting abnormalities have led to increased testing without proven benefit.

Source: Choosing Wisely, Society for Vascular Medicine, American Society of Hematology-similar recommendation

24. Opioid Analgesics for chronic non-cancer pain

Don't prescribe opioid analgesics as first-line therapy to treat chronic non-cancer pain.

Physicians should consider multimodal therapy, including non-drug treatments such as behavioral and physical therapies prior to pharmacological intervention. If drug therapy appears indicated, non-opioid medication (e.g., NSAIDs, anticonvulsants, etc.) should be trialed prior to commencing opioids.

Source: Choosing Wisely, American Society of Anesthesiologists – Pain Medicine

25. ESAs for CKD patients

Don't administer erythropoiesis-stimulating agents (ESAs) to chronic kidney disease (CKD) patients with hemoglobin levels greater than or equal to 10 g/dL without symptoms of anemia.

Administering ESAs to CKD patients with the goal of normalizing hemoglobin levels has no demonstrated survival or cardiovascular disease benefit, and may be harmful in comparison to a treatment regimen that delays ESA administration or sets relatively conservative targets (9–11 g/dL). ESAs should be prescribed to maintain hemoglobin at the lowest level that both minimizes transfusions and best meets individual patient needs.

Source: Choosing Wisely, American Society of Nephrology